REMARKS

The present Amendment amends claims 1, 8, 16, 22, 29 and 37 and

leaves claims 2-7, 9-15, 17-21, 23-28, 30-36 and 38-42 unchanged.

Therefore, the present application has pending claims 1-42.

Applicants hereby strongly urge that the Examiner contact Applicants'

Attorney, the undersigned, so as to discuss the outstanding issues of the

present application prior to examination based on the present Amendment.

An interview to discuss the outstanding issues of the present

application is essential being that it appears from the Office Action that the

Examiner may have completely disregarded the agreement and discussions

reached during the interview of August 5, 2004, wherein it was recognized by

Examiner Dinh and Supervisory Patent Examiner Donald Sparks that

Blumenau does "not [to] teach the limitations of 'groups of host computers'"

wherein security information is provided indicating relationships between each

of the host groups and each of the storage regions accessible for each of the

host groups as recited in the claims. A discussion to clarify the previous

agreements is necessary and essential to progress the prosecution of the

present application.

Claims 1-7 and 22-28 stand rejected under 35 USC §103(a) as being

unpatentable over Burton (U.S. Patent No. 6,633,962) in view Blumenau (U.S.

Patent Application Publication No. 2001/0020254); and claims 8-21 and 29-42

stand rejected under 35 USC §102(e) as being anticipated by Burton. These

rejections are traversed for the following reasons. Applicants submit that the

features of the present invention as now more clearly recited in claims 1-42

are not taught or suggested by Burton or Blumenau whether taken individually or in combination with each other as suggested by the Examiner. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw these rejections.

Amendments were made to each of the independent claims so as to more clearly describe features of the present invention. Particularly, amendments were made to the claims to more clearly recite that the present invention is directed to a storage system such as that illustrated, for example, in Fig. 1 of the present application having a control unit 40 for receiving a data write request from a plurality of host computers 10, 20, 30, which configure a plurality of host groups and at least one storage unit 50 coupled to the control unit wherein the storage unit 50 has a plurality of regions 51, 52 for storing data.

According to the present invention the control unit has security information, for example, as illustrated in Figs. 7b and 7b which indicate relationships between each of the host groups and each of the storage regions accessible for each of the host groups. The security information is used by the control unit to reject accesses from other host groups other than each of the host groups that are permitted to access each of the storage regions.

According to the present invention the control unit operates in response to a Port Login (PLOGI) frame from a new host computer which is newly coupled to the control unit and acquires a World Wide Name (WWN) and Source Identifier (S_ID) contained in the PLOGI frame from the PLOGI frame

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so that an administrator can select a storage region to be accessed from a host group to which the new host computer belongs by using the acquired WWN.

Further, according to the present invention as now more clearly recited in the claims when setting/alteration of access permit/deny to storage regions from the host computers is carried out on an identifier basis, the identifier is selectable to be either an identifier designating a plurality of host computers collective or an identifier designating one of the host computers.

Thus, according to the present invention when setting/alteration of access permit/deny to the storage regions using the identifier designating the plurality of host computers collectively is selected, the identifier designating the host computers collectively including the new host computers and storage regions are displayed on a display.

Further, according to the present invention when setting/alteration of access permit/deny to the storage regions using an identifier designating one of the host computers is selected, the identifier designating the new host computer and storage regions are displayed on the display. The above described features wherein different types of identifiers are selectable and the selected identifier and the storage regions are displayed on a display screen are disclosed, for example, on page 13, lines 21 and in Figs. 7b and 7b of the present application.

The above describe features of the present invention provides unique advantages over that of conventional apparatus such as that taught by Burton and Blumenau being that the present invention eliminates the time consuming

and burdensome task performed the administrator in conventional systems of setting on a WWN basis with respect to each of the host computers, the access/deny conditions relative to each individual host computer relative to the storage regions. The present invention as now more clearly recited in the claims reduces this tedious and burdensome process on the part of the administrator by allowing access permit/deny conditions to be set with respect to the storage regions on an identifier basis wherein the identifier can identify a plurality of host computers collectively. By allowing such setting according to the present invention the administrator need not perform repetitive processes with respect to each host computer included within the plurality of host computers as would have been necessary in conventional apparatus.

In addition to the above, the present invention also allows the administrator to select which of the setting operations can be used on an identifier basis, wherein one of the selectable identifiers identifies a plurality of host computers collectively and wherein the other one of the selectable identifiers identifies one host computer of the plurality of host computers. This feature of the present invention allows for the administrator to select when the reduced setting procedures are to be used.

The above described features of the present invention now more clearly recited in the claims are not taught or suggested by any of the references of record whether taken individually or in combination with each other. Particularly, the above described features of the present invention as now more clearly recited in the claims are not taught or suggested by Burton

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or Blumenau whether taken individually or in combination with each other as suggested by the Examiner.

Burton teaches a method and system for restricting host access to at least one logical device.   As taught by Burton, at least one logical device and at least one host are assigned to a cluster group, wherein hosts that are not in the cluster group cannot access the logical devices that are assigned to the cluster group and within each cluster group a logical number is assigned to each logical device in the cluster group such that no host of that cluster group uses the assigned logical number to access another logical device. Thus, Burton merely teaches the same as that described above with respect to conventional apparatuses, namely the setting of LUN, cluster group and other information on a host by host basis. In other words, in Burton as clearly described therein individually sets for each host the logical devices to which the host within the cluster group can access. The Examiner's attention is directed to Figs. 2, 5 and 11-14 of Burton.

There is no teaching or suggestion in Burton which allows for the setting of access/permission to storage regions from the host computers on an identifier basis, wherein the identifier is selectable to be either an identifier designating a plurality of host computers collectively or an identifier designating one of the host computers. In other words, there is no teaching or suggestion in Burton that allows for a single identifier to be used to configure a plurality of host computers relative to a particular logical device and storage region as in the present invention.

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Since there is no teaching of performing configuration using an identifier of a plurality of host computers in Burton, then it follows that there is no teaching or suggestion in Burton which allows for the administrator to select between the use of identifiers of a plurality of host computers or an identifier which identifies one of the host computers for configuration purposes as in the present invention.

Thus, Burton fails to teach or suggest that setting/alteration of access permit/deny to storage regions from the plurality of host computers is carried out on an identifier basis, wherein the identifier is selectable to be either an identifier designating a plurality of host computers collectively or an identifier designating one of the plurality of host computers as recited in the claims.

Further, Burton fails to teach or suggest that when setting/alteration of access permit/deny to storage regions using the identifier designating the plurality of host computers collectively is selected, the identifier designating the plurality of host computers collectively including the new host computer and storage regions are displayed on a display as recited in the claims.

Still further, Burton fails to teach or suggest that when setting/alteration of access permit/deny to storage regions using the identifier designating one of the plurality of host computers is selected, an identifier of the new host computer and storage regions are displayed on the display as recited in the claims.

Therefore, as is clear from the above, the features of the present invention as recited in the claims are not taught or suggested by Burton. Accordingly, reconsideration and withdrawal of the 35 USC §102(e) rejection

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of claims 8-21 and 29-42 as being anticipated by Burton is respectfully requested.

The above noted deficiencies of Burton are not supplied by any of the references of record particularly Blumenau whether taken individually or in combination with the other references of record. Therefore, combining the teachings of Burton with the teachings of Blumenau still fails to teach or suggest the features of the present invention as now recited in the claims.

Blumenau as was agreed during the August 4, 2004 interview as merely teaching the setting of logical unit numbers on a host by host basis. The Examiner's attention is directed to Figs. 19-22 of Blumenau. There is absolutely no teaching or suggestion in Blumenau, and such was agreed during the interview, of the configuration of the storage system using identifiers of groups of host computers first to set access permit/deny conditions relative to storage regions as in the present invention as now more clearly recited in the claims.

Thus, Blumenau fails to teach or suggest that <u>setting/alteration of access permit/deny to storage regions from the host computers is carried out an identifier basis, wherein the identifier is selectable to be either an identifier designating a plurality of host computers collectively, or an identifier designating one of the host computers</u> as recited in the claims.

Further, Blumenau fails to teach or suggest that <u>when setting/alteration of access permit/deny to storage regions using the identifier designating the host computers collectively is selected, the identifier designating the host computers collectively including the new host computer and storage regions,</u>

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the identifier of the new host computers and storage regions are displayed on the display as recited in the claims.

Still further, Blumenau fails to teach or suggest that when setting/alteration of access permit/deny to storage regions using the identifier designating one of the plurality of host computers is selected, an identifier of the new host computer and storage regions are displayed on the display as recited in the claims.

Therefore, as is quite clear from the above, Blumenau suffers from the same deficiencies as Burton as shown above relative to the features of the present invention as now more clearly recited in the claims. Accordingly, reconsideration and withdrawal of the 35 USC §103(a) rejection of claims 1-7 and 22-28 is respectfully requested.

The remaining references of record have been studied. Applicants submit that they do not supply any of the deficiencies noted above with respect to the references utilized in the rejection of claims 1-42.

In view of the foregoing amendments and remarks, applicants submit that claims 1-42 are in condition for allowance. Accordingly, early allowance of claims 1-42 is respectfully requested.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C., Deposit Account No. 50-1417(500.39520CX2).

Respectfully submitted,

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.
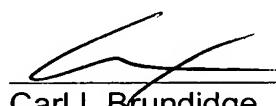
Carl I. Brundidge
Registration No. 29,621

CIB/jdc
(703) 684-1120

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